

Revised Hunt Management Plan

Lower Hatchie National Wildlife Refuge

and

Sunk Lake Public Use Natural Area

Lauderdale and Tipton Counties, Tennessee

Signature:

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LOWER HATCHIE NATIONAL WILDLIFE REFUGE
and
SUNK LAKE PUBLIC USE NATURAL AREA
HUNTING PLAN

I. Introduction

Lower Hatchie National Wildlife Refuge is located at the confluence of the Hatchie and Mississippi Rivers in Lauderdale and Tipton counties in West Tennessee. The refuge encompasses the lower reaches of the Hatchie River and consists of bottomland hardwoods, moist soil units, agricultural fields, and associated uplands.

The refuge was established on June 19, 1980, under the authority of 16 U.S.C. Sec. 715d (Migratory Bird Conservation Act) "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Subsequent land purchases were made under the authority of 16 U.S.C. Sec 460k-1 (Refuge Recreation Act) "suitable for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species." The refuge is important in that it contains the bulk of the bottomland hardwood forest that remains west of Highway 51 along the Hatchie River.

Lower Hatchie NWR is currently 9,107 acres with an approved acquisition boundary that includes an additional 14,122 acres. When acquisition is complete, the refuge will protect the bulk of the remaining bottomland hardwoods in the lower reaches of the Hatchie River. The refuge is important because it lies at the confluence of the Hatchie and Mississippi Rivers and contains ecotypes that are beneficial to wetland wildlife species. Land types include bottomland hardwood forests, moist soil units, upland grasslands, upland forests, agricultural fields, and administrative areas. In addition, there are several open water areas including Champion, Little Champion, and Shingle Lakes, and Shoaf and Teal Ponds. Refuge management, since its establishment, has focused on the excellent natural habitats and supplemented production of natural waterfowl foods through a cooperative farming program. These important migratory bird habitats are perpetuated through sound silvicultural practices, responsible agricultural activities, and careful water level management.

Sunk Lake Public Use Natural Area, located approximately 5 miles west of Three Points on Sunk Lake Road, was established in 1986 by the Tennessee Department of Environment and Conservation (TDEC). Sunk Lake PUNA is administered by Lower Hatchie NWR through 10 year lease agreements with TDEC. Sunk Lake PUNA encompasses 1,873 acres which includes 175 acres of open water in eight lakes, 290 acres of cypress swamp, and 1,408 acres of bottomland hardwood forest. Public use activities are restricted to fishing and non-consumptive uses on the southern unit. The northern unit has been open to small game, archery deer hunting, and non-consumptive uses since 2001. Service management activities consist primarily of resource protection,

maintenance of the boat access/boardwalk area, boundary maintenance, and waterfowl surveys.

Lower Hatchie National Wildlife Refuge and Sunk Lake PUNA are predominately bottomland hardwoods. The most common wildlife includes white-tailed deer, coyote, beaver, mink, muskrat, raccoon, waterfowl, and neotropical migrant songbirds. The refuge is also utilized by a host of avian predators including marsh hawks, red-tailed hawks, barred owls, and the bald eagle. The natural beauty and opportunities for hunting, fishing, bird watching, and photography make the refuge a popular attraction for approximately 120,000 visitors each year.

Hunting has been permitted as a compatible public use activity on Lower Hatchie National Wildlife Refuge since acquisition. The original hunting plan was completed, reviewed by the public, and approved through channels in 1981. This revised hunting plan supercedes the original document and subsequent revisions. Refuge hunting seasons generally coincide with Tennessee State hunting seasons and require only occasional minor changes. Refuge small game, big game, and waterfowl hunting seasons were initiated following the establishment of the refuge in 1980. Turkey hunting was closed during a several year period of high water that severely affected the turkey population, but was reopened in 2001 after the turkey population recovered.

The refuge hunts have been a great wildlife management and public relations tool by providing quality recreational opportunities for the general public while regulating specific animal populations at desired levels. The following refuge hunting plan has been developed to ensure the associated public recreation and wildlife management objectives are met in a responsible and consistent manner by means that are compatible with the purposes for which the refuge was established. Any future proposals to alter the refuge hunting program will require an amendment to this plan.

II. Conformance with Statutory Authorities

The Lower Hatchie National Wildlife Refuge was established on June 19, 1980, under the authority of 16 U.S.C. Sec. 715d (Migratory Bird Conservation Act) "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Subsequent land purchases were made under the authority of 16 U.S.C. Sec. 460k-1 (Refuge Recreation Act) "suitable for - (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, and (3) the conservation of endangered species or threatened species."

Service policy concerning hunting on National Wildlife Refuges, 8 RM 5.1, states: "The Secretary of the Interior is authorized by the National Wildlife Refuge System Administration Act of 1966, as amended, and the Refuge Recreation Act of 1962 to permit hunting on any refuge within the Refuge System upon a determination that

hunting is compatible with the major purposes for which such areas were established. In addition to a compatibility determination, the Refuge Recreation Act also requires the Secretary to determine that funds are available for the development, operation, and maintenance of the hunting program.

History has shown that the opening of Lower Hatchie National Wildlife Refuge to small game, big game, and waterfowl hunting, and the northern portion of Sunk Lake to small game and archery deer hunting has resulted in only temporary disturbance to refuge habitats and caused no noticeable impact on the abundance of species hunted or other wildlife affected by hunter disturbance. Seasonal zoning to coincide with game species abundance and low waterfowl use periods has resulted in minimal disturbance to migratory waterfowl and permits hunting to occur on all or designated portions of the 9,107 acre refuge. Therefore, the hunting program is compatible with the purposes for which the refuge was established and is in compliance with the National Wildlife Refuge System Administration Act, the Refuge Recreation Act, and the Refuge Improvement Act of 1997.

Funding for the hunting program is borne by annual operation and maintenance funds, which includes activities involving the public, such as recreation, interpretation, environmental education, and conduct of refuge hunting and fishing programs. The cost of operating and maintaining the present upland game, big game, and waterfowl seasons will be approximately \$7,500.00 annually. With an annual refuge budget of approximately \$300,000.00, the necessary funds are available for the administration of the hunting program. Therefore, the program is in compliance with specific funding portions of the Refuge Recreation Act. In compliance with Service requirements, an environmental assessment for existing hunts has been written. A Section 7 consultation, regarding endangered species on the refuge, has been prepared, and prescribed information on the refuge hunts has been published in the Federal Register.

III. Statement of Objectives

The primary purpose of Lower Hatchie National Wildlife Refuge and Sunk Lake Public Use Natural Area is to provide wintering habitat for migrating and wintering waterfowl. The refuge is administered under the umbrella of the West Tennessee Wildlife Refuges Complex headquartered in Dyersburg, TN. One of the goals is to provide continued public use opportunities, which is compatible with restoration and/or conservation of ecosystem functions (or a legal mandate), and to actively promote and encourage public use, which facilitates ecosystem restoration and management.

Refuge objectives to guide management of Lower Hatchie National Wildlife Refuge and associated programs are:

1. Provide habitats for migratory birds, especially wintering populations of waterfowl.

2. Provide habitats for a diversity of resident wildlife, including numerous species of birds, mammals, reptiles, amphibians, and fishes.
3. Provide opportunities for wildlife/wildlands recreation including environmental education, interpretation, hunting, fishing, and wildlife observation.

The Service has long recognized that hunting is an integral part of a comprehensive wildlife management program and that significant positive benefits can be attributed to a well-managed hunt. In addition, hunting is an acceptable, traditional form of wildlife-oriented recreation that can be, and is sometimes used as, a management tool to effectively manipulate wildlife population levels.

The objectives of the refuge hunting program are as follows:

1. To provide the general public with a quality wildlife oriented recreational experience and an opportunity to utilize a renewable natural resource.
2. To maintain wildlife populations at levels compatible with refuge habitat and objectives.

Hunting was a traditional recreational use of the refuge proper prior to inclusion into the refuge system, and continues to be a popular recreational pursuit with the public. However, opportunities for hunting have become very limited in the surrounding area due to the posting of private land, major expansion of hunting leased lands, and the significant decline in available wildlife habitat on private land in the vicinity. Refuge hunting will continue to provide additional public hunting opportunities in a region that is lacking sufficient amounts of acreage open to the public. Hunting will be available for small game (squirrel, quail, rabbit, opossum, and raccoon), big game (deer), waterfowl, other migratory birds (mourning dove, woodcock, and snipe), and wild turkey. Present populations of these species will continue to support a sustainable harvest under a regulated hunting program.

Hunting and possible conflicts with other refuge objectives are minimized by an annual review of the hunting program. Coordination with Service field and Regional Office personnel and representatives of the Tennessee Wildlife Resources Agency prevent unnecessary conflicts with other Service and State agency hunting programs. Refuge hunting seasons coincide with established State seasons where possible, but terminate in the waterfowl sanctuary area of the refuge prior to the arrival of major concentrations of wintering waterfowl and bald eagles in late November.

IV. Assessment

The refuge resident small game populations are primarily regulated by environmental influences including weather, food supply, cover, and disease. Small game species are dominated by forest dwellers including fox and gray squirrels, raccoon, and opossum, while the proportionately small acreage of open lands provides habitat for species such as rabbits, bobwhite quail, and mourning doves. Seasonal reductions in small game populations by hunting has not affected other forms of recreation or management objectives.

The white-tailed deer population is of sufficient density to offer quality hunting opportunities while maintaining the herd and habitat in a desirable and healthy status. Currently, the refuge deer hunt follows the state season and is not adversely affecting the deer population or significantly affecting the opportunities for wildlife observation. During August 2001, the refuge conducted a deer herd health check which indicated the refuge herd was at a healthy level and below carrying capacity under current conditions.

The wild turkey population is primarily regulated by environmental influences including weather, food supply, water levels, predator density, and disease. The Tennessee Wildlife Resources Agency (TWRA) has trapped turkeys from the refuge in previous years to supplement its stocking program. The population (75-150) could withstand the removal of 10-15% of the gobblers without affecting the population size or opportunities for wildlife observation. Turkey populations on the refuge have been slowly increasing since their decline in the mid-1990's due to several consecutive years of Mississippi and Hatchie River flooding. The flood conditions dramatically affected nesting conditions and the overall turkey population. Due to the reduced turkey population on the refuge, the season was closed and remained closed until the spring season of 2001. The 2001 spring turkey quota hunt generated 95 applicants and resulted in the registration of 30 individual hunters.

Waterfowl populations are driven by a complex group of environmental factors that include weather, sufficient water, and available food resources. Habitat management is geared toward providing guaranteed water and food resources, including a diversity of moist soil plants, flooded bottomland hardwoods, and cereal grains. This abundance of type, size, and available habitat is sufficient to meet the objectives of the Lower Mississippi River Joint Venture and provide for hunting activities to occur without affecting waterfowl utilization of the refuge.

V. Description of Hunting Program

The upland portions of the refuge, approximately 2,500 acres, support a permanent population of both fox and grey squirrels, white-tailed deer, and wild turkey. The

raccoon, which is found in both terrestrial and aquatic habitats of the refuge, occurs on most of the 9,107 acre area.

Except for administrative areas and the waterfowl sanctuary which are closed from November 15 - March 15, the entire refuge is open to small game, big game, waterfowl hunting, and other migratory birds hunting. Specific seasons and bag limits will be set each year to conform with annual population levels or habitat conditions and will fall within the general seasons and bag limits set below.

1. General Seasons and Bag Limits

Small game:

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| a. | Squirrel | Season dates and bag limits coincide with State seasons and regulations except the season is closed during deer gun hunts, youth deer hunt, and muzzleloader hunts. Shotgun hunters are required to use nontoxic shot. |
| b. | Raccoon | Season dates and bag limits coincide with State season and regulations. Changes may be made annually. Shotgun hunters are required to use nontoxic shot. |
| c. | Quail | Season dates and bag limits coincide with State season and regulations. Changes may be made annually. Shotgun hunters are required to use nontoxic shot. |
| d. | Rabbit | Season dates and bag limits coincide with State season and regulations. Changes may be made annually. Shotgun hunters are required to use nontoxic shot. |
| e. | Opossum | Season dates and bag limits coincide with State season and regulations. Changes may be made annually. Shotgun hunters are required to use nontoxic shot. |

Big Game:

These deer hunts are conducted to optimize hunter utilization of the refuge without impacting wintering waterfowl populations.

- f. Deer (firearms) Typically set to run concurrently with the Tennessee Firearms Deer season. The bag limit of two deer, bucks only.
- g. Deer (Archery) Typically set to run concurrently with the Tennessee Archery Deer season. The bag limit of four deer to include no more than two antlered deer.
- h. Deer (Youth/Gun) Typically set to run concurrently with the Tennessee Youth Deer season. The bag limit of one deer, either sex.
- i. Deer (Muzzleloader) Typically set to run concurrently with the Tennessee Muzzleloader Deer season. The bag limit of two deer to include no more than one antlered deer.
- j. Turkey Three two-day weekends in April of each year. Hunter numbers will be annually adjusted based upon information indicating the level of the turkey population. The bag limit will be one male turkey per hunter.

Waterfowl:

- h. Waterfowl Typically set to run concurrently with the Tennessee Waterfowl season. State seasons and bag limits apply, except legal shooting hours are 30 minutes before sunrise to 12:00 noon. Nontoxic shot required.

A refuge permit is required to participate in all refuge hunts. In addition, turkey hunts are limited quota hunts. The quotas are consistent with harvest recommendations and hunter attendance, and are reviewed and determined annually. A public drawing to select the hunt participants is announced through the news media with the date, time, and location provided. The permit system is required to provide a quality hunt experience, as well as control the harvest of turkey, ensure hunter safety, and to acquaint the hunters with refuge regulations.

Deer and turkey harvested on the refuge must be tagged and taken to the nearest state checking station. Weights and measurements of the harvested deer or turkey will be taken and recorded, and the hunter will receive a permanent kill tag. Additionally, hunters must report Lower Hatchie National Wildlife Refuge as the kill location.

Law enforcement activities during the hunting seasons include random patrols by vehicle, field observation, plus the inspection of hunters' license, harvested game, and hunting equipment.

VI. Measures Taken to Avoid Conflicts With Other Management Objectives

Other refuge objectives are given equal or greater consideration and priority in planning the hunting program at Lower Hatchie National Wildlife Refuge. Because the primary objective of the refuge is the maintenance of wintering waterfowl, many refuge hunts terminate prior to the arrival of major waterfowl concentrations in late November.

A. Biological conflicts

The presence of a large wintering population of the threatened bald eagle during December-March creates no conflicts with the hunting program as few eagles arrive prior to or during the hunting season. Furthermore, the eagles preference for open water reduces its numbers in upland areas which are accessible to the hunters. Currently there are no known eagle nests on Lower Hatchie NWR, but if any active nests are discovered then the areas around the nests will be closed to all entry during the period that the eagles are nesting. A Section 7 consultation addressing the lack of conflicts has been prepared.

B. Public Use Conflicts

The conflicts between hunting and other forms of public use, including environmental education, wildlife observation, and photography are not significant due to the large acreage of land open to multiple use and good visitor access. For safety purposes, however, the refuge is closed to other forms of public use during the firearms deer hunts.

C. Administrative Conflicts

The administration of the hunt program by the refuge staff has minimal conflicts with other administrative duties and responsibilities. The program is planned and executed as part of the overall recreation program. Other objectives, including the farming program, waterfowl banding, construction, and maintenance projects are normally not impacted due to time and staff planning.

VII. Conduct of the Hunt

A. Refuge-specific Hunting Regulations

Refuge-specific hunting regulations regarding general hunting and the quota turkey hunt have been published in the Federal Register. A Federal Register notice adding wild turkey to the big game category has been submitted.

B. Anticipated Public Reaction to the Hunt

The public reaction to the refuge hunting program has been very favorable in the past. During 2001, more than 2,600 hunter visits were recorded during refuge hunts.

C. Hunter Application and Registration Procedure

A quota permit is required to participate in the turkey hunts. To apply for a permit, an applicant must submit one stamped, self-addressed U.S. Postal Service postal card in an envelope, addressed to the Refuge Manager. Applications must be postmarked anytime during the month of February for the turkey hunt. A party of two hunters may apply on the same post card. Applicants must include the following on the back of the post card:

1. The desired hunt
2. Complete name and address for each party member.
3. Date of birth for each party member (to identify potential duplicate applicants)
4. Indication of season preference, either 1st, 2nd, or 3rd

The hunter selection process consists of a random drawing held during March. Successful applicants are notified by mail prior to the hunt to allow preseason scouting of the hunting area. Each hunter also receives a copy of the refuge hunting regulations. A mandatory hunter survey will accompany each quota permit. Failure to return this survey within the specified time frame will disqualify that hunter from the following year's quota hunts.

D. Description of Hunter Selection Process

Permits will be issued through a drawing conducted by the Lower Hatchie National Wildlife Refuge for refuge portions of the hunt. The refuge manager will coordinate permit procedures with state agencies annually, and ensure that all regulatory considerations are fulfilled.

E. Media Selection for Announcing and Publicizing the Hunt

The refuge hunts are publicized by the news release process to all appropriate newspaper publishers and radio stations in the west Tennessee area. Information presented in the refuge news release includes areas open to hunting, species permitted to be taken, hunting seasons, permit requirements, and the permit application procedures.

F. Description of Hunter Orientation, Including Pre-Hunt Scouting

Hunter orientation will not be provided, but the refuge will be open to pre-hunt scouting.

G. Youth Requirements

Youth hunting on the refuge will be in compliance with Tennessee hunter education requirements. Hunters less than 16 years of age must be under the supervision of an adult.